WHAT IS CLAIMED IS:

1. Feedthrough apparatus comprising the combination of a housing having an opening therein and having a member with a surface at the opening, and a feedthrough extending through the opening in the housing and forming an interface with the housing, the feedthrough being brazed to the housing at the interface, the surface of the housing extending at least to the feedthrough, and the member having an opening therein adjacent the feedthrough to minimize surface area contact at the interface between the feedthrough and the housing.

2. Feedthrough apparatus in accordance with claim 1, wherein the opening in the member has edges which extend from side walls of the feedthrough under the feedthrough by small distances.

3. Feedthrough apparatus in accordance with claim 1, wherein the opening in the member is approximately equal in size to the feedthrough and has edges which engage side walls of the feedthrough.

4. Feedthrough apparatus in accordance with claim 1, wherein the feedthrough is made of ceramic having a given coefficient of thermal expansion and the housing is made of metal having a coefficient of thermal expansion which is substantially different from the given coefficient of thermal expansion of the ceramic.

5. Feedthrough apparatus in accordance with claim 4, wherein the feedthrough is brazed to the housing at the interface therebetween with a silver and copper mixture that brazes at a temperature of at least about 780°C.

6. Feedthrough apparatus comprising the combination of a housing having a generally planar base with a corner and a side wall mounted on the base and having an opening therein at the corner of the base, and a generally L-shaped feedthrough mounted on the housing and extending through the opening in the side

wall, and wherein the base beneath the feedthrough has an opening therein which is not substantially smaller than the feedthrough so as to substantially reduce the surface area of contact between the feedthrough and the housing.

7. Feedthrough apparatus in accordance with claim 6, wherein the feedthrough is made of ceramic, the housing is made of metal, and the feedthrough forms an interface with the housing and is brazed to the housing at the interface.

8. Feedthrough apparatus in accordance with claim 6, wherein the opening of the base is substantially equal in size to the feedthrough so that the base does not extend under the feedthrough.

9. Feedthrough apparatus in accordance with claim 6, wherein the generally L-shaped feedthrough is comprised of two leg portions joined at a generally right angle at the corner of the base plate and includes a pair of lead frames extending from the two leg portions to the outside of the housing.

10. Feedthrough apparatus comprising the combination of a housing having a generally planar base and an elongated side wall mounted on the base and having an opening therein, and a feedthrough of generally rectangular shape mounted on the housing and extending through the opening in the side wall, and wherein the base has a rectangular shaped opening therein beneath the feedthrough to substantially reduce the surface area of contact between the feedthrough and the housing.

11. Feedthrough apparatus in accordance with claim 10, wherein the base forms a small ledge around the rectangular-shaped opening beneath a back edge and opposite side edges of the feedthrough of generally rectangular shape.

12. Feedthrough apparatus in accordance with claim 10, wherein the rectangular-shaped opening in the base is of like size with the feedthrough and has edges which engage a back wall and opposite side walls of the feedthrough.

13. Feedthrough apparatus comprising the combination of a housing having a generally planar base and an elongated side wall mounted on the base, the base having a slot in the underside thereof extending into the base from a side edge thereof, the slot extending upwardly through part but not of the thickness of the base, and a feedthrough mounted within the slot in the base, the base having an opening therein adjacent the feedthrough which extends from an upper surface of the slot through the remainder of the thickness of the base to substantially reduce the surface area of contact between the feedthrough and the housing and to provide access to the feedthrough from inside the housing.

14. Feedthrough apparatus in accordance with claim 13, wherein the slot, the feedthrough and the opening are generally rectangular in shape, the slot and the feedthrough being similar in size and the opening being slightly smaller.